

DRAFT BOARD ORDER

IN THE MATTER OF

S.D. WARREN COMPANY)	WATER QUALITY CERTIFICATION
Standish, Windham, Sebago, Naples,)	
Casco, Raymond, and Frye Island)	
Cumberland County)	
EEL WEIR HYDROPOWER PROJECT)	FINDINGS OF FACT AND ORDER
#L-19937-33-J-Z)	ON APPEAL

Pursuant to the provisions of 38 M.R.S.A. § 341-D(4) and *Rules Concerning the Processing of Applications and Other Administrative Matters*, 06-096 CMR 2 (effective April 1, 2003), the Board of Environmental Protection (Board) has considered the appeals of CHARLES M. FRECHETTE and DOUGLAS H. WATTS of the Department's Order of August 30, 2011 granting water quality certification, with conditions, pursuant to *Federal Water Pollution Control Act*, 33 U.S.C. § 1341(a)(1) (Section 401 of the Clean Water Act), for the continued operation of the Eel Weir Hydropower Project by S.D. WARREN COMPANY (Warren). Based on a review of the materials submitted by the appellants and the applicant and other related materials on file, the Board FINDS THE FOLLOWING FACTS:

1. PROCEDURAL HISTORY

- A. The existing Eel Weir Hydropower Project (Project) is owned and operated by Warren. The Project is located at the outlet of Sebago Lake and controls water levels in Sebago Lake and flows in the downstream Presumpscot River, which runs about 25 miles to head-of-tide in Falmouth. A dam has existed at the site since at least 1827. The Project includes a dam, an impoundment (Sebago Lake), a power canal, a powerhouse, tailrace channel, a bypass reach (Eel Weir Bypass) between the dam and the downstream end of the tailrace channel, and ancillary facilities.
- B. The Project was initially licensed by the Federal Energy Regulatory Commission (FERC) on March 16, 1984 (with an expiration of March 31, 2004) under the Federal Power Act for the continued operation and maintenance of the existing Project. The initial license did not contain conditions regarding the management of lake levels, minimum flow releases from the Project, or the installation of fish passage facilities at the Project. A 1992 FERC order established minimum flow requirements in the Eel Weir Bypass. A 1997 FERC order, as amended in 2000 and 2001, established a lake level management plan. The Project is currently operated in a store-and-release mode in accordance with its FERC license as amended by these orders.
- C. On March 19, 2002, Warren filed an application with the Department of Environmental Protection (Department) for water quality certification in conjunction with the proposed FERC relicensing of the Project. The application was subsequently voluntarily withdrawn and refiled each year by Warren, with the last filing on January 25, 2011. Warren

supplemented its application on May 26, 2011 (as revised June 6, 2011) with a proposed lake level management plan.¹

- D. On March 29, 2002, Warren filed an application with FERC for a new license for the continued operation of the existing Project. As of the date of this Board order, FERC continues to review Warren's application and has not issued a final license for the Project.
- E. On July 26, 2011, the Department issued a draft order approving water quality certification for the continued operation of the existing Project by Warren subject to a number of conditions. Comments on the draft order were invited from Warren, state resource agencies, and other interested persons, including the appellants. Comments on the draft order were received from the Portland Water District, the Maine Department of Inland Fisheries and Wildlife, Sebago Lake Marina (owned by Charles M. Frechette), the Town of Frye Island, and Douglas H. Watts.
- F. By Order #L-19937-33-J-N dated August 30, 2011, the Commissioner of the Department issued a final order approving water quality certification (WQC) for the continued operation of the existing Project by Warren subject to numerous conditions. In order to provide a reasonable assurance that the continued operation of the Project will not violate applicable water quality standards in Sebago Lake and in the Presumpscot River and other receiving waters below the Project, the conditions include requirements for target lake levels, minimum flows, a flow cap during landlocked salmon spawning season, upstream and downstream eel passage, and improved public boat access. The WQC also includes specific conditions giving the Department the right, after notice to the applicant and opportunity for hearing, to reopen the WQC in the future for purposes of considering anadromous and resident fish passage and modification of the lake level management plan.²
- G. On September 26, 2011, Charles M. Frechette filed with the Board a timely administrative appeal of the Department's August 30, 2011 WQC. Appellant Frechette requested a hearing but did not submit proposed supplemental evidence.³
- H. On September 27, 2011, Douglas H. Watts filed with the Maine Superior Court a Petition for Review of the Department's August 30, 2011 WQC. A direct appeal to Superior Court of a final license decision of the Commissioner of the Department is allowed by 38 M.R.S.A. §§ 344(2-A) and 346. The Rule 80C appeal was timely filed.
- I. On March 8, 2012, in response to a request from the Department and after hearing from all parties, the Maine Superior Court remanded the Rule 80C appeal to the Board for

¹ An applicant for a FERC license must complete a three stage consultation process with appropriate state and federal agencies. The consultation process requires the applicant to serve a copy of its FERC application, including any revisions, supplements or amendments thereto, on each of the agencies consulted.

² Section 5 of this order contains a more complete summary of the WQC conditions at issue in this appeal.

³ While Appellant Frechette attached several exhibits to his appeal, all are documents that are already in the existing application record.

consideration together with the administrative appeal filed by Charles M. Frechette. The Court provided Douglas H. Watts with a deadline of April 13, 2012 to file a more detailed written appeal statement with the Board. *Watts v. Maine Department of Environmental Protection*, KEN-AP-11-54 (Me. Super. Ct., Ken. Cty., March 8, 2012).

- J. On April 13, 2012, Douglas H. Watts filed a more detailed written appeal statement with the Board in accordance with the Court's order. Appellant Watts did not submit proposed supplemental evidence or request a hearing.
- K. On April 20, 2012, the Board received an "Appeal of Water Quality Certification" and proposed supplemental evidence from Save Our Sebago, a non-profit entity formed on February 24, 2012 by certain persons interested in Sebago Lake. The filing was also submitted on behalf of Appellant Frechette to "restate and clarify" his appeal. On April 24, 2012, the Board Chair summarily dismissed the appeal of Save our Sebago as untimely and further ruled the submission on behalf of Appellant Frechette as untimely under 06-096 CMR 2(24)(B). The filing and accompanying supplemental materials were returned.
- L. On April 23, 2012, Warren filed with the Board a Motion to Dismiss the appeals of Douglas H. Watts and Charles M. Frechette on the basis that neither appellant has standing as an aggrieved person to bring an appeal of the WQC to the Board.
- M. On May 10, 2012, after providing appellants an opportunity to file written responses to Warren's motion, the Board Chair ruled that Charles M. Frechette and Douglas H. Watts both have standing as aggrieved persons to bring an appeal of the WQC to the Board. It was noted that a Board Chair's ruling on standing is subject to appeal to the full Board, and the deadline imposed for such filing was May 17, 2012. No appeals were filed.
- N. On June 13, 2012, Warren filed with the Board a response to the appeals.⁴

2. STANDING AND TIMELINESS

The Board finds that Charles M. Frechette, as a Sebago Lake shorefront property and marina owner affected by fluctuating impoundment water levels, is an aggrieved person and has standing to bring this appeal of the WQC before the Board. The Board finds that Douglas H.

⁴ On July 14, 2012, Douglas H. Watts requested that the Board include in the appeal record a letter from the U.S. Environmental Protection Agency (USEPA), dated July 9, 2012, concerning river herring passage at the Grand Falls Dam on the St. Croix River. On July 18, 2012, the Board Chair responded to the parties that the Board could take official notice of the letter and that the parties could refer to it during oral argument before the Board, and provided an opportunity for parties to comment on the legal relevance of the letter to the pending appeals. On August 6, 2012, Warren submitted such comments. The USEPA letter concludes that a state statute requiring affirmative actions to be taken to prevent the migration of a population of native, anadromous fish past a dam, when those fish are actually present in substantial numbers immediately below the dam, is not legally effective for the purposes of the Clean Water Act as a water quality standard. Those factual circumstances are fundamentally different from the circumstances before the Board in this water quality certification proceeding, and the Board finds that the letter is not informative of the issues now before it in light of the legal and factual context in which the letter was written.

Watts' use of Sebago Lake for fishing, boating, photography, swimming and other recreational and vocational uses goes beyond that of the public at large and that he is an aggrieved person and has standing to bring this appeal of the WQC before the Board. The appeals filed by Charles M. Frechette and Douglas H. Watts⁵ were timely.

3. REQUEST FOR HEARING

Appellant Frechette requests a hearing on his appeal of the WQC. He argues that Sebago Lake is a natural resource of statewide significance, the application is one of substantial public interest, and it was approved by the Department without a hearing or benefit of input from the public.

The record shows that the application for WQC was filed in March 2002. In the decade between its submission and its approval, there were countless opportunities for interested persons and agencies to comment on appropriate management of Sebago Lake water levels, flows in the Presumpscot River, and the needs of various co-occurring designated uses of these waters. Appellant Frechette and other users of the resource attended meetings and submitted numerous comments throughout this period for consideration.

The Board finds that although Warren last amended its application for WQC on June 6, 2011, those amendments were the culmination of years of discussions regarding management of lake levels and river flows. A draft of the WQC at issue in this appeal was distributed for public comment in accordance with the provisions of 38 M.R.S.A. § 344(4-A)(A), and Appellant Frechette availed himself of the opportunity to comment. Appellant Frechette's appeal did not contain any new, proposed supplemental evidence for consideration or provide summaries of proposed testimony. Under provisions of 38 M.R.S.A. §§ 341-D(4) and 345-A(1-A), hearings are discretionary for the Commissioner and the Board. The Board finds that substantial information has already been submitted and considered over the lengthy course of the processing of this application. In addition, there is no credible, conflicting technical evidence in the record that warrants scheduling a hearing to gather additional information. Therefore, the Board finds the record is fully developed for a decision and that a hearing on the appeals would not be helpful to the Board in its consideration of this matter.

4. STANDARD OF REVIEW

38 M.R.S.A. § 341-D(4) provides that, in acting on an appeal of a Commissioner's license decision, "[t]he board is not bound by the commissioner's findings of fact or conclusions of law but may adopt, modify or reverse findings of fact or conclusions of law established by the commissioner. Any changes made by the board under this paragraph must be based upon the board's review of the record, any supplemental evidence admitted by the board and any hearing held by the board." In its decision on appeal, the Board "may affirm, amend, [or] reverse" the Commissioner's license decision, "or remand to the commissioner for further proceedings."

⁵ Because the Court in *Watts v. Maine Department of Environmental Protection* remanded Douglas H. Watts' timely filed Rule 80C appeal to the Board, it is deemed timely.

5. WATER QUALITY STANDARDS AND CERTIFICATION

In issuing water quality certification under Section 401 of the Clean Water Act, the Department must find that there is a reasonable assurance that the project will not violate applicable water quality standards. 33 U.S.C. § 1341. The Department may approve water quality certification if the standards of classification of the affected water bodies and the requirements of the State's antidegradation policy will be met. 38 M.R.S.A. § 464(4)(F)(3).

The receiving waters that are or may be affected by the Eel Weir Project are:

- Sebago Lake and Dundee Pond: Class GPA
- Presumpscot River, including impoundments except where noted:
 - Class A from the outlet of Sebago Lake, including the Eel Weir Bypass, to its confluence with the Pleasant River (excluding Dundee Pond)
 - Class B from its confluence with the Pleasant River to Saccarappa Falls
 - Class C from Saccarappa Falls to tidewater
- Presumpscot River estuary: Class SC
- Casco Bay: Class SB and Class SC

The State's water quality standards establish water quality objectives for all State waters by: (1) designating uses and related characteristics of those uses for each class of water, and (2) prescribing water quality criteria necessary to protect those uses and related characteristics. In addition, the State's antidegradation policy protects and maintains certain existing uses.

- A. Designated Uses. Class GPA, Class A, Class B, and Class C waters must be of such quality that they are suitable for the designated uses of drinking water (after disinfection for Classes GPA and A, and after treatment for Classes B and C); recreation in and on the water; fishing; industrial process and cooling water supply; hydroelectric power generation; navigation; and as habitat for fish and other aquatic life. 38 M.R.S.A. §§ 465(2)(A), 465(3)(A), 465(4)(A), and 465-A(1)(A).

Class SB and Class SC waters must be of such quality that they are suitable for the designated uses of recreation in and on the water, fishing, aquaculture, propagation and harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation, and as habitat for fish and other estuarine and marine life. 38 M.R.S.A. §§ 465-B(2)(A) and 465-B(3)(A).

The designated use of "habitat for fish and other aquatic life" is further refined to include habitat characteristics for certain classes. The habitat of Class GPA and Class A waters must be characterized as natural. 38 M.R.S.A. §§ 465(2)(A) and 465-A(1). "Natural" is defined as "living in, or as if in, a state of nature not measurably affected by human activity." 38 M.R.S.A. § 466(9).

The habitat of Class B and Class SB waters must be characterized as unimpaired. 38 M.R.S.A. §§ 465(3)(A) and 465-B(2)(A). "Unimpaired" means "without a diminished capacity to support aquatic life." 38 M.R.S.A. § 466(11).

- B. Water Quality Criteria. The water quality criteria protect and support the designated uses. In addition to specific dissolved oxygen levels,⁶ the criteria at issue under appeal describe the water quality conditions that must exist to support aquatic life.

Class GPA waters shall have a stable or decreasing trophic state subject only to natural fluctuations as measured by chlorophyll "a" content, Secchi disk transparency, total phosphorus content and other appropriate criteria. 38 M.R.S.A. § 465-A(1)(B).

The aquatic life of Class A waters shall be as naturally occurs. 38 M.R.S.A. § 465(2)(B). "As naturally occurs" is defined as "conditions with essentially the same physical, chemical and biological characteristics as found in situations with similar habitats free of measurable effects of human activity." 38 M.R.S.A. § 466(2).

Class B waters "must be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community." 38 M.R.S.A. § 465(3)(C). "Without detrimental changes in the resident biological community" is defined as "no significant loss of species or excessive dominance by any species or group of species attributable to human activity." 38 M.R.S.A. § 466(12).

Class C waters "must be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community." 38 M.R.S.A. § 465(4)(C).

The term "indigenous" means "supported in a reach of water or known to have been supported according to historical records compiled by State and Federal agencies or published scientific literature." 38 M.R.S.A. § 466(8).

The habitat characteristics and aquatic life criteria of Classes A and B are deemed to be met in existing impoundments classified as A or B if (1) the impounded waters satisfy Class C aquatic life criteria (the receiving waters shall be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community), and (2) any reasonable changes that can be implemented that do not significantly affect existing energy generation and would result in improvement in the habitat and aquatic life of the impounded waters are in fact implemented and any resulting improvement in habitat and aquatic life is achieved and maintained. 38 M.R.S.A. § 464(10).

⁶ See WQC at 17-18 for a more detailed description of the dissolved oxygen criteria applicable to each class of water.

The habitat characteristics and aquatic life criteria of Class C are deemed to be met in existing impoundments classified as C if the Class C aquatic life criteria are met and any reasonable changes that have been implemented that do not significantly affect existing energy generation and result in improvement in the habitat and aquatic life of the impounded waters are maintained. 38 M.R.S.A. § 464(10).

- C. Antidegradation Policy. State waters are protected by the State's antidegradation policy which provides that certain existing in-stream water uses and the level of water quality necessary to protect those existing uses must be maintained and protected. 38 M.R.S.A. § 464(4)(F).

When the actual water quality of existing impoundments classified as GPA, A, B or C attains any more stringent characteristic or criteria of those waters' classification, that water quality must be maintained and protected. 38 M.R.S.A. §464(9) & (10).

6. SUMMARY OF EXISTING OPERATION OF THE PROJECT

The Eel Weir Project is currently operated in a store-and-release mode in accordance with its 1984 FERC license, as amended by a 1992 FERC order establishing minimum flow requirements in the Eel Weir Bypass and a 1997 FERC order, as amended in 2000 and 2001, establishing a lake level management plan (LLMP).

The existing FERC orders require, among other things, the following:

- Warren is required to manage outflows from Sebago Lake through the Project to achieve specified target lake elevations by specified dates (May 1 to mid-June, August 1, September 1, November 1) and to maintain the lake level within specified target ranges for different seasons, including a target lake level of 261.0 feet mean sea level (msl) or lower by January 1 in 2 out of every 9 years.
- When the lake level is within the established lake level target ranges between May 1 and November 1, flows released from Sebago Lake may vary between 333 cubic feet per second (cfs) and 1000 cfs.
- When the lake level is outside the established lake level target ranges, flows are increased or decreased in stages to bring the lake level back within the target lake level range for the specified season.
- Between November 1 and May 1, the lake level is managed as appropriate based on precipitation, snow pack conditions, energy needs and other considerations.
- Flows out of the lake are capped at 1000 cfs between October 15 and November 15 (unless the lake level is above the target range and rising) to accommodate the landlocked salmon spawning season.
- Minimum flow requirements in the Eel Weir Bypass are: 25 cfs from November 1 through March 31, 75 cfs from April 1 through June 30, 50 cfs from July 1 through August 31, and 75 cfs from September 1 through October 31.

The existing operation of the Project is more fully described in Section 4 of the Water Quality Certification.

7. SUMMARY OF WATER QUALITY CERTIFICATION

In accordance with Section 401(a) and (b) of the Clean Water Act, the conditions of the State's water quality certification must be included in the articles of any new FERC license issued for the Eel Weir Hydropower Project. The conditions of the WQC under appeal provide for changes in the operation of the Project by, among other things, specifying only one target lake level (266.0 feet msl between May 1 and June 15 annually) within an annual target lake level range of 266.65 feet msl to 262.0 feet msl. The WQC also requires certain minimum flows to the Bypass and to the Presumpscot River as a whole, minimizes flows greater than 300 cfs to the Bypass, and caps total outflow from Sebago Lake between October 16 and November 15 annually to accommodate landlocked salmon spawning.

The specific conditions of the WQC at issue under appeal include the following:

- Except under specified circumstances such as maintenance, extreme hydrologic conditions, and emergencies, Sebago Lake water levels shall be managed within a target range between 266.65 feet msl and 262.0 feet msl, with lake levels above or below this range triggering increased or decreased flow releases, respectively, from Sebago Lake, with the goal of achieving a level of 266.0 feet msl (0.65 feet below spillway crest elevation) between May 1 and June 15 annually (Condition 1A);
- Except under specified circumstances such as maintenance, extreme hydrologic conditions, and emergencies, a total minimum flow of 270 cfs shall be released from the Project as a whole (Eel Weir Bypass plus power canal) at all times, except that a total minimum flow of 408 cfs shall be released from the Project between June 1 and September 30 annually whenever spillage is required at the downstream Dundee and Gambo Dams to maintain dissolved oxygen levels in the Presumpscot River (Condition 2A);
- Except under specified circumstances such as maintenance, extreme hydrologic conditions, and emergencies, an instantaneous minimum flow of 75 cfs shall be released into the bypassed river reach (Eel Weir Bypass) below the project dam at all times, and the occurrence of flow releases greater than 300 cfs into the Eel Weir Bypass shall be minimized (Condition 2B);
- Except under specified circumstances such as maintenance, extreme hydrologic conditions, and emergencies, flows from the Project shall be capped at 1000 cfs during the landlocked salmon spawning season from October 16 through November 15 annually (Condition 3A);
- Upstream eel passage facilities shall be installed and operational at the Eel Weir Project within 2 years following the issuance of a new FERC license for the project (Condition 4A);
- Downstream eel passage facilities shall be installed and/or operational measures to provide downstream eel passage shall be implemented at the Eel Weir Project within 2 years following the issuance of a new FERC license for the project (Condition 5A);

- A provision by which the Department reserves the right, after notice to the applicant and opportunity for hearing, to reopen the certification for consideration of requiring the installation of such fish passage facilities as may be deemed necessary to pass anadromous and/or resident fish species, including but not limited to landlocked Atlantic salmon, upstream and downstream through the project area (Condition 6); and
- A provision by which the Department reserves the right, after notice to the applicant and opportunity for hearing, to reopen the certification, upon any future determination by the Department that the water quality of Sebago Lake is declining, for consideration of requiring such modification of the lake level management plan in effect for the Project as maybe deemed necessary to ensure that the operation of the Project does not cause or contribute to any decline in the water quality of Sebago Lake (Condition 7).

8. OVERVIEW OF THE MERITS

Many of the arguments raised in these appeals have as their premise an interpretation of water quality standards that the Board rejects as contrary to law. For example, Appellant Watts largely bases his arguments on the notion that the Class A standard requires flows in the Presumpscot River to replicate those flows that would exist in a *natural* condition, *i.e.*, in the absence of the Eel Weir Dam. Similarly, he asserts that the GPA standard mandates that the level of Sebago Lake must be maintained at *natural* levels, which he interprets as those levels that would exist in the absence of the Dam. As support for this argument he cites statutory language providing that the habitat for fish and other aquatic life in Class A and Class GPA waters must be “characterized as natural.” 38 M.R.S.A. §§ 465(2)(A), 465-A(1)(A), and 466(9).

The problem with Appellant Watt’s argument is that it effectively reads out of the law another component of the Class A and GPA standards that makes hydroelectric power generation a designated use of these waters. 38 M.R.S.A. §§ 465(2)(A), 465-A(1)(A). In this order the Board reads the statutory scheme as a whole to give effect to all applicable standards, and in doing so reconciles the demands of co-occurring designated uses to the extent practicable. Here, that means rejecting an interpretation of standards that would require river flows and lake levels that replicate conditions that would exist in the absence of the Eel Weir Dam, since the law contemplates the possibility of hydroelectric generation at this location. Instead, the Board’s decision today is consistent with the Department’s longstanding interpretation of Class A and GPA standards, as expressed and applied in many previous water quality certification orders, which is that the *habitat* of the waterbody, rather than any specific river flows or lake levels, must be “characterized as natural.” Appellant Watts’ argument would effectively reclassify this river segment to the Class AA standard, which does not include hydroelectric generation as a designated use and requires that habitat “be characterized as *free flowing and natural*.” The Board’s interpretation respects this important distinction, set forth in the law, between Class AA and Class A waters.

These appeals also demonstrate the challenge associated with reconciling the demands of co-occurring designated uses through a water quality certification. Appellant Watts' arguments are aimed primarily at increasing flows in the Presumpscot River in order to enhance aquatic life habitat. Appellant Frechette's arguments are aimed primarily at maintaining higher lake levels in Sebago Lake in order to facilitate motorized recreation on the water. Both of these interests have statutory support through the designated uses of the respective waterbodies, but the goals that these uses represent are in direct tension with each other. Generally speaking, increasing flows within the River comes at the expense of the water level within the Lake. Therefore, in granting certification for the Eel Weir Project the Department must seek a balance that maintains all statutory goals, even if there are perceived conflicts between uses. Note that the USEPA states that "Among uses listed in the Clean Water Act, there is no hierarchy" (EPA-823-B-94-005a (1994)). Those Clean Water Act uses that apply to this WQC include: public water supply; protection and propagation of fish, shellfish and wildlife; recreation; industry; navigation; and hydroelectric power. The Board is satisfied the terms of this certification successfully assure attainment of all applicable water quality standards among the co-occurring designated uses for the reasons set forth more specifically below.

9. BASES OF DOUGLAS H. WATTS' APPEAL

Appellant Watts argues the WQC is erroneous as a matter of law and is not supported by the evidence in the record. Appellant Watts primarily objects to the findings, conclusions and conditions pertaining to water flows and conditions in the Bypass and the target water levels for Sebago Lake. In brief, Appellant Watts argues that:

- The WQC, by establishing two separate flow standards for this reach of the Presumpscot River (an instantaneous minimum flow of 75 cfs for the Bypass and an instantaneous minimum flow of 270 cfs from the Project as a whole – Bypass and power canal combined – with provision for an instantaneous minimum flow of 408 cfs when needed for dissolved oxygen downstream), has arbitrarily created a less protective category of Class A standard for the Bypass without a Use Attainability Analysis and without the required approval of the Maine Legislature and the U.S. Environmental Protection Agency (USEPA).
- Lake water levels and river flows established in the WQC are not natural and do not meet applicable Class GPA and Class A water quality standards.
- The Department did not properly apply Class A water quality standards when evaluating the minimum flows to be released from the Project.
- The WQC fails to require installation of anadromous and resident fish passage at the Project and thus violates State water quality standards.
- The lake level targets have no technical or legal basis, are unenforceable and meaningless, and are harmful to beaches along the shore of Sebago Lake.
- The fall outflow cap of 1,000 cfs is unlawful and prevents the lake from behaving naturally.

Appellant Watts requests that the WQC be amended to:

- Instead of an instantaneous minimum flow of 75 cfs year round to the Bypass, require an instantaneous minimum flow of 270 cfs year round for the Eel Weir Bypass with outflows above 270 cfs apportioned on a 50/50 basis to the Bypass and power canal.
- Require immediate installation of fish passage for indigenous fish species at the Project, including but not limited to brook trout and landlocked Atlantic salmon.
- Instead of a lake level target range of 262.0 feet msl to 266.65 feet msl, establish a lake level target range of 259.0 feet msl to 265.0 feet msl.
- Delete the fall outflow cap of 1,000 cfs between October 16 and November 15 annually.

10. BASES OF CHARLES M. FRECHETTE'S APPEAL

Appellant Frechette argues the WQC is erroneous as a matter of law and is not supported by the evidence in the record. Appellant Frechette primarily objects to the findings, conclusions and conditions related to the target lake water levels and required outflows from Sebago Lake to the Presumpscot River. In brief, Appellant Frechette argues that:

- The increase in the instantaneous minimum flow from the Project (Eel Weir Bypass plus power canal) to the Presumpscot River, coupled with the elimination of a number of target lake levels for various points in time throughout the year, ensures that the lake will be lower than in the past and will reduce the lake level to 262.0 feet msl in the middle of the open water (boating) season with adverse impacts to recreation, navigation, and habitat for fish and other aquatic life.
- Class GPA water quality standards are not met at lake levels below 263.5 feet msl when there is no water in the periodically dewatered areas in which to recreate.
- The Department intentionally and inappropriately lowered lake levels in the WQC to expose lake bottom to be used as beach area at Sebago Lake State Park and Tassle Top Park.
- Warren should be required to spill water at the downstream dams and not use water from Sebago Lake to ensure downstream water quality standards are achieved.
- Eel passage is not supported by water quality standards or technical information in the record.
- The WQC must quantify the increased power generation expected from the changes in the lake level management plan and minimum release flow.

Appellant Frechette requests a hearing and asks that the WQC be either reversed or amended to:

- Decrease the instantaneous minimum flow from the Project to the river from 270 cfs to 250 cfs.

- Establish a lake level compliance point of 264 feet msl during the period of April 1 to October 15 of each year and 263 feet msl during the period of November 1 to April 1 of each year. When the lake level drops below these specified compliance points, Warren should be required to reduce outflow from the lake to the Presumpscot River to 250 cfs.

11. DISCUSSION OF APPEALS / PRESUMPCOT RIVER AND BYPASS

- A. Interpretation of Class A Water Quality Standards. Appellant Watts asserts in Claim 1(A) of his appeal that the Department utilized an improper alternate interpretation of Class A water quality standards that is less protective than the plain language of the statute, that this interpretation is unlawful because it effectively removes the term “natural” from the Class A standard, and that this alternative standard did not receive prior approval of the Legislature, as required by Maine statute, or USEPA. Appellant Watts’ fundamental argument is that flows in the Class A reaches of the Presumpscot River including the Bypass must be natural, which he interprets to be the flows that would exist without a dam.

Warren responds that Class A water quality standards do not require lake levels or river flows to be natural. Only Class AA waters must be characterized as free-flowing. Class A standards require that *habitat* be characterized as natural, which is not the same as requiring *flows* to be natural. Warren further argues that Class A standards for habitat do not need to be identical at all times in location or size to the habitat that would exist in the absence of human activity. Warren highlights the statement in the WQC that “Maine’s water quality standards do not require that lake levels and stream flows be as naturally occurs in order to attain Class GPA and Class A water quality standards, respectively. Rather, Class GPA and Class A standards are intended to protect and maintain the ecological functions and values of natural conditions for high quality waters. These standards do not require that lake levels and stream flows be unaltered.” Warren responds that this statement is not an alternate interpretation of the law, but an accurate statement of the law.

Analysis: Class A water quality standards require that “waters must be of such quality that they are suitable for the designated uses of drinking water after disinfection; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as habitat for fish and other aquatic life. The *habitat* must be characterized as natural.” 38 M.R.S.A. § 465(2)(A)(emphasis added). “Natural” means “living in, or as if in, a state of nature not measurably affected by human activity.” 38 M.R.S.A. § 466(9). In contrast, Class AA does not include the designated use of “hydroelectric power generation” and requires that “[t]he habitat must be characterized as *free-flowing and natural*.” 38 M.R.S.A. § 465(1)(A)(emphasis added).

The Board finds that *habitat*, not flow, associated with Class A waters must be characterized as natural. This interpretation is consistent with the plain language of the statute and the Board's long-standing interpretation of the State's water quality standards. Only Class AA waters need be free-flowing. Thus, it is not inconsistent with the State's Class A water quality standards to find that a particular water level and flow regime that deviates from pre-dam levels or flows will not violate the State's Class A water quality standards and is not equivalent to setting a new alternate water quality standard for which Legislative and USEPA approval is required. An important phrase in the statutory definition of *natural* is "living in, or as if in..." That phrase was intended to recognize that there are a range of conditions that fall within "a state of nature not measurably affected by human activity" and that management of the designated uses provided for in the statute should take into account that range of conditions. The term "or as if in" is intended to recognize that human activities may be present but their effects to organisms "living in" these waters should be managed within the range of natural conditions. In fact, Appellant Watts' argument that lake levels and outflows from the lake to the river cannot be altered is inconsistent with the use of the waterbody for hydroelectric power generation, a use which is expressly allowed by statute, as are other designated uses which could affect an unaltered state. The Board finds that Appellant Watts' interpretation of the State's Class A water quality standards regarding lake levels and outflows from the lake to the river is legally unfounded.

- B. Hydropower Project Flow and Water Level Policy. Appellant Watts asserts that the Department's use of the Bureau of Land and Water Quality Hydropower Project Flow and Water Level Policy, February 4, 2002 (*i.e.*, the 3/4ths wetted width policy) and professional judgment in lieu of the plain language of Class A standards to evaluate water quality conditions and required flows in the Bypass is inappropriate. Appellant Watts' fundamental argument on this point is that the methodology used to collect and evaluate data on dissolved oxygen and habitat for aquatic life was flawed because it excluded portions of the braided river channel. He argues that the entire policy is an informal "back of the envelope" standard. This argument underlies several of Appellant Watts claims that an instantaneous minimum flow 75 cfs in the Bypass is insufficient and will not meet Class A standards.

Warren responds that the Department applies the 3/4ths wetted width policy on a case-by-case basis. In this case the Department determined bank full conditions in the Bypass based on available cross sectional information, excluding braided river channel conditions. Regarding the policy as a whole, Warren responds that it has been applied consistently, but on a case-by-case basis, for many years.

Analysis: The Bureau of Land and Water Quality's Hydropower Project Flow and Water Level Policy, February 4, 2002, states, "In determining flows and water levels at hydropower projects, the Bureau of Land and Water Quality will operate under the rebuttable presumption that a flow providing wetted conditions in a weighted average of 3/4ths of the cross-sectional area of the affected river or stream, as measured from bank full conditions, or a water level that provides wetted conditions for 3/4ths of the littoral zone of a lake or pond, as measured from full pond conditions, will be needed to meet

aquatic life and habitat standards. Bank full conditions for rivers and streams will be determined based on the available cross sectional information or, where appropriate, average summer flow conditions.”

In evaluating the proposed minimum flows for purposes of meeting the habitat and aquatic life standards for Class A waters, the WQC states:

There must be both sufficient quality and quantity of habitat for aquatic organisms to meet aquatic life standards. The Department has found that, generally, flows providing wetted conditions in a weighted average of 3/4ths of the cross-sectional area of a river or stream, as measured from bank full conditions, are sufficient to meet aquatic life and habitat standards. However, each waterway is different in terms of the value of various flows in providing habitat for aquatic life, and conflicts may exist between the habitat needs of various resident aquatic organisms and between various designated uses of the waterbody. As a result, on a case-by-case basis, the Department often establishes alternative flows based on identified site-specific conditions and data, where those alternative flows can be shown to meet all water quality standards. WQC at 25-26.

The record shows that Warren conducted an in-stream flow study in the Eel Weir Bypass in the summer of 2001, in accordance with a study plan developed in consultation with state and federal fisheries agencies. Aquatic habitat suitability in the Bypass was evaluated using the Instream Flow Incremental Methodology (IFIM) and employed the Physical Habitat Simulation Model (PHABSIM) to quantify fish habitat and flow relationships wherever possible. WQC at 25. This study generated a report entitled, Eel Weir Bypass Reach Instream Flow Study, Final Report, January 2002, which is included in Appendix D of Warren’s application to FERC. The report documents that a total of 11 transects were established in representative riffle and run habitats in the Bypass, of which two were established in braided stream habitat. Brook trout and landlocked Atlantic salmon, the species of management interest in the Bypass, rely primarily upon riffle-run habitat during spawning and early life stages. The report concluded that since the braided channel area represents only approximately 16% of the coldwater habitat of the Bypass, the instream flow recommendation should focus primarily on the protection of habitat in the riffle and run areas represented in the other nine transects studied. The report concluded that a flow of between 75 cfs and 100 cfs could potentially satisfy the management objectives of the Bypass.

The Department’s Second Stage Consultation Comments⁷ on Warren’s draft application for a new FERC license documents that only transects in the non-braided reaches of the Bypass

⁷ Letter from Dana Murch, DEP, to Maureen Winters, Kleinschmidt Associates, commenting on draft application for relicensing of the Eel Weir Project, December 28, 2001. Eel Weir Record #676.

were included in the bank full analysis, and that a flow of about 80 cfs is needed to provide 75% wetted conditions in the Bypass reach to satisfy the habitat standards for Class A waters. Because of differences that exist between the habitat needs of various resident aquatic organisms and between various designated uses of the waterbody, ultimately a minimum flow of 75 cfs was determined to satisfy *all* Class A water quality standards.

The Board finds that the Department's 3/4ths wetted width policy was developed for the express purpose of providing guidance for determining the water levels and flows needed to meet water quality standards at hydropower projects. It is based upon substantial Department experience in evaluating flows and assessing aquatic habitat requirements. The Policy establishes a rebuttable presumption to be assessed on a case-by-case basis taking into consideration site specific conditions and data, as was done here. The Board finds that Warren's in-stream flow study, which was used to quantify habitat and flow relationships, was conducted in a variety of habitat types. It considered how best to address the braided nature of the Bypass channel, and ultimately did not use braided stream habitat in determining bank full conditions. The Board finds that the Department's application of best professional judgment was consistent with the Hydropower Project Flow and Water Level Policy. It constitutes just one piece of the overall site-specific evaluation of minimum release flows necessary to assure compliance with Class A water quality standards. The Board finds that the Department used appropriate methodology for evaluating a minimum regulated flow in the Bypass that would provide reasonable assurance that habitat and aquatic life standards are met.

C. Minimum Flow and Water Quality Standards in the Bypass

- (1) Dissolved Oxygen. Condition 2A of the WQC requires an instantaneous minimum flow of 75 cfs to be released to the Bypass at all times. Appellant Watts asserts in Claim 1(B) that the instantaneous minimum flow of 75 cfs to the Bypass is insufficient and violates Class A dissolved oxygen standards in the Eel Weir Bypass. Appellant Watts' fundamental argument on this point is that portions of the Eel Weir Bypass that are not wetted at the minimum flow of 75 cfs cannot contain dissolved oxygen and therefore do not meet the Class A standards. He argues the 3/4ths wetted width policy discussed above was not appropriately applied in determining that 75 cfs meets water quality standards and that by considering only the wetted portion of the Bypass virtually any flow above zero could meet standards.

Warren responds that there is no dispute that the water in the Bypass meets the numeric Class A dissolved oxygen standards of 75 parts per million (ppm) or 75% saturation, whichever is higher. Warren reiterates that Class A water quality standards do not require that flows in the Bypass replicate flows that would occur naturally if the dam was not in place, and that the minimum flow of 75 cfs found to meet Class A water quality standards was properly derived.

Analysis: Appellant Watts' arguments that flows in Class A waters must be natural and that the methodology used to establish a minimum flow of 75 cfs to the Bypass was inappropriately derived are addressed above in Sections 11A and 11B of this order.

With respect to dissolved oxygen, Warren conducted ambient water quality monitoring in the Eel Weir Bypass during the summer of 2000, in accordance with the Department's River Sampling Protocol. Dissolved oxygen and temperature sampling was conducted at two locations on six days during periods with extended releases of 50 cfs from the Eel Weir Dam into the Bypass and with no significant precipitation or runoff. Sampling was conducted in both early morning and mid-afternoon to determine the maximum diurnal fluctuation in dissolved oxygen levels. Analysis of the data indicated that dissolved oxygen met Class A numeric standards of 7 parts per million or 75% saturation, whichever is higher during all sampling events.

The Board finds that the evidence in the record clearly demonstrates that dissolved oxygen standards for Class A waters will be met in the Bypass at a minimum flow of 75 cfs. Appellant Watts' assertion that the dissolved oxygen standard is not met in portions of the Bypass that are not wetted at flows of 75 cfs or less is based on a misunderstanding of Class A water quality standards with respect to flows. Nothing in water quality law mandates that flow in the Class A Eel Weir Bypass be equivalent to pre-dam, *i.e.*, natural, flow rates.

- (2) Habitat for Fish and Other Aquatic Life. In Claims 1(C), (D), (E), and (G) Appellant Watts argues that a minimum flow of 75 cfs to the Bypass does not meet aquatic life standards for Class A waters.

Appellant Watts asserts that the Department's macroinvertebrate studies, which were conducted only in the wetted portions of the Bypass channel, indicate the wetted portions of the Bypass only meet Class B standards for aquatic life at the minimum flow of 75 cfs. Appellant Watts cites Department rule Chapter 579 Classification Attainment Evaluation Using Biological Criteria for Rivers and Streams, section (5)(A), which provides that professional judgment may only be used where other standards and criteria pertinent to protecting aquatic life uses of the classification are attained including, but not limited to, support of indigenous fish. Appellant Watts argues that because in his view the Bypass does not meet Class A standards for other criteria, the Department cannot rely on professional judgment to find that the macroinvertebrate population is indeterminate and therefore in compliance with Class A standards for aquatic life.

In support of his argument that the Bypass does not meet Class A for other criteria, Appellant Watts cites a statement from Maine Department of Inland Fisheries and Wildlife (MDIFW) indicating that attempts in the 1980s to establish a self-sustaining cold-water fishery for landlocked Atlantic salmon were unsuccessful. Appellant Watts extrapolates that if the Eel Weir Bypass is not capable of supporting self-

sustaining populations of coldwater fish, then it is not supporting all indigenous species and falls short of meeting Class A water quality standards. In a related argument, Appellant Watts states that the Department admits in the WQC that the Eel Weir Bypass does not support natural, self-sustaining populations of native, indigenous brook trout and Atlantic salmon. He argues that this constitutes failure to meet Class A, B and C water quality standards. Appellant Watts states that Warren's fish habitat utilization studies show that there is significantly more usable habitat for adult brook trout and landlocked Atlantic salmon at flows of 200 cfs than at flows of 75 cfs; therefore, Appellant Watts argues in Claim 3 that habitat is impaired at flows of 75 cfs.

Warren responds that there is nothing in Class A water quality standards that requires fish populations to be self-sustaining. Although the Bypass does not support self-sustaining populations of brook trout and salmon, it does support these indigenous species, which is all that is required in determining whether the Class A aquatic life standard is met. In response to Appellant Watts' arguments that higher flows increase useable habitat, Warren responds that the question is not one of comparison. The fact that there may be less habitat at one flow than another does not mean that water quality standards are violated. The question is whether a flow of 75 cfs meets the Class A standard for habitat for fish and other aquatic life.

Analysis: The record shows that Warren conducted benthic macroinvertebrate community monitoring in the Eel Weir Bypass during the summer of 2000, in accordance with Department protocols.⁸ The Department's Division of Environmental Assessment concluded that the macroinvertebrate community sampled in the Bypass during Warren's 2000 study does in fact meet Class A standards for aquatic life.⁹ This determination was made using professional judgment in accordance with *Classification Attainment Evaluation Using Biological Criteria for Rivers and Streams*, 06-096 CMR 579 (effective May 27, 2003). The Division of Environmental Assessment concluded that evaluation of monitoring data using the Department's linear discriminant model indicates that the sampled community attains Class B standards and is indeterminate for attainment of Class A standards. The majority of organisms sampled were filter feeders, which are indicative of a Class B community. However, sensitive organisms were present in good numbers, indicating good water quality conditions in the Bypass. The most likely cause of the presence of a predominantly filter feeder community in the Bypass is the fact that minimum flows here come directly from Sebago Lake, resulting in an abundance of planktonic food to support a filter feeder community.

⁸ Eel Weir Project, Application for New License, Volume III, submitted to the Federal Energy Regulatory Commission by S.D. Warren Company, Eel Weir Record #3, Appendix D-6, referencing "Methods of Biological Sampling and Analysis of Maine's Inland Waters" by Susan P. Davies and Leonidas Tsomides, March 1997, DEP-LW107-A97.

⁹ Memo from Leon Tsomides, DEP, to Dana Murch, DEP, commenting on benthic macroinvertebrate data, February 11, 2002. Eel Weir Record #685.

Chapter 579 states, "Where there is documented evidence of conditions that could result in uncharacteristic findings, allowances may be made to account for those situations by adjusting the classification attainment decision through use of professional judgement." 06-096 CMR 579(3)(G). "Factors that may allow adjustments to the model outcome include but are not limited to: habitat factors, including lake outlets from waters classified GPA." 06-096 CMR 579(3)(G)(1). The sampled macroinvertebrate community in the Bypass reflects natural conditions below a lake outlet. Accordingly, the Department found that the sampled community meets Class A standards for aquatic life.

The Board finds that sampling of the macroinvertebrate community was conducted in accordance with Department protocols, and the Department's application of best professional judgment in determining that the Bypass meets Class A aquatic life standards is consistent with that allowed by 06-096 CMR 579. Appellant Watts' argument that the macroinvertebrate community does not meet Class A standards because certain fishery management objectives established by the MDIFW in the mid-1980s were not accomplished has no legal merit. One goal of Maine's water quality standards is for all fresh surface waters to be suitable as habitat for fish and other aquatic life, with specific habitat characteristics assigned to certain classes. Contrary to Appellant Watts' argument, the Class A standards do not necessarily require that *all* indigenous species actually be present and self-sustaining without regard to the particular facts and circumstances of the waterbody. Many factors can affect sustainability of populations such as the natural lack of a critical habitat type or competition from other species. Maine's water classification law only requires that water quality must be sufficient to protect indigenous species; it cannot assure presence or self-sustainability, because of the many other factors that determine those conditions. The Board therefore rejects Appellant Watts' interpretation of the Class A standard and finds that the operation of the Project, including an instantaneous minimum flow of 75 cfs to the Eel Weir Bypass on a year-round basis, will provide both sufficient quality and quantity of habitat for fish and other aquatic life to meet applicable Class A water quality standards for aquatic life.

- (3) Significance of Coldwater Refugia. In Claim 4 Appellant Watts asserts that the "WQC unlawfully and improperly uses data regarding coldwater refugia in the Eel Weir Bypass to defend its 75 cfs flow and to argue against natural or otherwise higher flows than 75 cfs." Appellant Watts states that historic records show that the Bypass reach supported "a large, healthy and wild population of native salmon and brook trout immediately prior to the construction of the Eel Weir Dam in 1907." He argues that the "purported 'need' for the cold water seeps ... is an artifact of the lack of passage for native fish at the Eel Weir Dam."

Warren responds that Appellant Watts again argues that flows in the Bypass must be natural, which is an incorrect interpretation of the law. Warren states that Appellant Watts incorrectly assumes that the only reason coldwater refugia data are considered is because fish passage is not required as part of the certification.

Analysis: The Eel Weir Bypass Reach Instream Flow Study, Final Report, January 2002, documents that there are two existing coldwater seeps in the Bypass that provide a refuge from unsuitable warm summer water temperatures for coldwater species, including brook trout, brown trout, and landlocked Atlantic salmon. At flows of 79 cfs or less, existing coldwater seeps provide two areas of thermal refuge from warm summer water temperatures for coldwater fish in the Bypass while at flows of 115 cfs and above, the areas of thermal refuge are reduced or eliminated. At 75 cfs the Bypass is more suitable to the indigenous coldwater fish species of primary management concern than it is for other species, such as the non-native smallmouth bass which preys upon and competes with these indigenous species for habitat.¹⁰

The Board finds that the Department appropriately considered coldwater refugia data in its evaluation of the minimum flow to the Bypass needed to satisfy the designated uses of fishing and habitat for fish and other aquatic life while still meeting all other water quality standards and designated uses. Contrary to Appellant Watts' assertion that a minimum flow of 75 cfs to the Bypass is not supported by credible evidence, the Board finds that the Department relied on valid results from the Eel Weir Bypass Reach Instream Flow Study and other data in concluding that a minimum flow of 75 cfs will meet Class A water quality standards.

- (4) 7Q10 Flow. Appellant Watts asserts in Claim 2 that the minimum flow of 75 cfs in the Bypass violates water quality standards in the Bypass because it puts the Bypass in a perpetual condition of extreme drought. The basis for Appellant Watts' argument is his claim that 75 cfs is nearly four times lower than the regulated 7Q10 estimate (270 cfs) for the Presumpscot River at the Eel Weir Project.

Warren responds that Appellant Watts is once again arguing that habitat in the Bypass cannot be natural or unimpaired at 75 cfs because natural flows are greater than 75 cfs. Warren reiterates, "Class A aquatic habitat standards do not require natural flows."

Analysis: The Board finds this argument to lack merit because it is predicated on the false assumption that 7Q10 flow levels are *per se* insufficient for the attainment of Class A standards. The 7Q10 flow is the 7-day average low flow for a particular water body that occurs with a 10 year recurrence interval. The Department utilizes this measurement of critical low flow conditions in its water quality modeling for the purpose of determining waste load allocations, primarily in the context of permitting discharges of pollutants. The utility of the 7Q10 concept in waste discharge permitting, however, is not readily transferable to the context of determining minimum flows necessary to attain Class A habitat standards in the Bypass. The attainment issue in the Bypass is not driven by the capacity of the water body to absorb particular pollutant loads, but instead the availability of water itself to satisfy competing demands in Sebago Lake and the Presumpscot River.

¹⁰ See WQC at 20 for a more detailed description of fishery management objectives.

Assuring attainment in the Bypass is not about limiting the discharge of pollutants, but instead about how best to manage a scarcity of water under certain hydrologic conditions. Under these circumstances, 7Q10 flow levels do not necessarily have any direct correlation to the minimum flow levels that will allow for attainment of Class A standards. The Department documented in the WQC that the natural drought flow from Sebago Lake and therefore the natural 7Q10 as calculated by the U.S. Geological Survey, is 40 cfs. The regulated outflow from Sebago Lake, and thus the 7Q10, was set at 270 cfs to provide adequate assimilation capacity for downstream discharges. Since the WQC provides that no less than 75 cfs (of the 270 cfs) must be provided in the Bypass, this actually supplements the natural drought flow condition, and will be to the advantage of the Bypass segment by increasing the available wetted habitat during drought conditions and protect fish and other aquatic life resources from severe drought stress. The Board finds that the minimum flows of 270 cfs as a total release from the Project and 75 cfs as the portion to be diverted to the Bypass are sufficient to attain applicable water quality standards, and 7Q10 flow levels have no necessary legal significance to this determination.

- (5) Applicability of Chapter 587. Appellant Watts states in Claim 6 that a minimum flow of 75 cfs to the Bypass does not comply with the requirements set forth in Chapter 587 In-Stream Flows and Lake and Pond Water Levels because the withdrawal of water from the Bypass by diversion to the power canal causes or contributes to the Bypass being in non-attainment of Class A water quality standards; accordingly, the withdrawal does not meet the definition of nonconsumptive water use.

With respect to Chapter 587, Warren responds that the minimum flow of 75 cfs complies with the definition of nonconsumptive water use because conditions in the Bypass do, in fact, meet Class A standards.

Analysis: Chapter 587 of the Department's rules establishes requirements governing "withdrawals or other direct or indirect removal, diversion, activities, or use of these waters that causes the natural flow or water level to be altered for all non-tidal fresh surface waters of the State. (06-096 CMR 587(1)). However, Chapter 587(8)(B) expressly states that "flows and water levels for hydropower projects...shall be established through the Water Quality Certification process...or a permit issued pursuant to the Maine Waterway Development and Conservation Act,... and therefore shall not be subject to or established through this Chapter...." Even if Chapter 587 applied to this certification, the flows and water levels established in that rule do not apply to ... nonconsumptive use. (06-096 CMR 587(1)(C)). The rule states that in order to meet the definition of nonconsumptive use, "Flows in the segment between a point of withdrawal and a downstream point of return must be sufficient to maintain all other water quality standards, including all designated uses and characteristics of the assigned classification. Activities that constitute a nonconsumptive use may occur during all flow and water level conditions." In this case, the Board has found that the minimum flow of 75 cfs in the Bypass complies with Class A water quality standards.

Because Chapter 587 does not apply to water quality certifications, and because the Board finds in any case that a minimum flow of 75 cfs in the Bypass complies with Class A water quality standards for the reasons set forth in this order, Appellant Watts' arguments regarding the failure to comply with Chapter 587 are without merit.

- D. Maintenance of Dissolved Oxygen in Lower Presumpscot River. Appellant Frechette objects to the required minimum flow of 270 cfs (and 408 cfs between June 1 and September 30 whenever needed to maintain downstream dissolved oxygen levels) from the Project (Bypass plus power canal). He argues that spillage requirements at downstream dams on the Presumpscot River, rather than spillage of Sebago Lake water at the Project, should be imposed to mitigate non-attainment of water quality standards for dissolved oxygen water in downstream stretches of the river.

Warren responds that several years of ambient dissolved oxygen monitoring in the Presumpscot River demonstrate that flow releases from Sebago Lake have had a significant effect on the ability of the river to meet applicable water quality standards. Warren cites an April 14, 2011 letter from the Department to Warren¹¹ regarding the 2010 dissolved oxygen monitoring report which concludes that increasing flows from Sebago Lake will improve dissolved oxygen in the river during the summer months. Warren also notes that the Maine Department of Conservation provided comments to FERC raising concerns about periods of extended high water in the lake during the fall and early winter periods before winter freeze-up because of concern for beach erosion. Warren states that the minimum outflow of 408 cfs when needed during summer months properly addresses dissolved oxygen concerns in the river and strikes the proper balance of the competing interests on the lake and the river during this period.

Analysis: The Presumpscot River originates at the outlet of Sebago Lake with the majority of the flow in the river coming from Sebago Lake.¹²

The WQC discusses downstream spillage requirements established in the Department's April 30, 2003 water quality certification for Warren's five downstream Presumpscot River Hydro Projects that were found to be necessary to meet Class B standards in the Presumpscot River above Westbrook. In response to the requirements of the April 30, 2003 water quality certification, Warren instituted the spillage of 50 cfs at the Dundee Dam and 100 cfs at the Gambo Dam. WQC at 29. These spillage conditions were subsequently incorporated into the FERC licenses for the Presumpscot River Hydro Projects.

¹¹ Letter from Dana Murch, DEP, to Brad Goulet, S.D. Warren, regarding 2010 dissolved oxygen monitoring report for the Presumpscot River Hydro Projects, April 14, 2011. Eel Weir Record #1696.

¹² Federal Energy Regulatory Commission notice of availability of Final Environmental Assessment for Project No. 2984, with attached FEA, December 29, 2005, p. 19. Eel Weir Record #1229.

Following analysis of dissolved oxygen data for 2008, 2009, and 2010, the Department commented that increasing the minimum flow from Sebago Lake, in conjunction with spillage requirements at Warren's Presumpscot River Hydro Projects, would improve dissolved oxygen levels in the river.¹³

Warren subsequently proposed a minimum flow of 408 cfs during the period of June 16 – October 15 in an effort to balance a lake level that supports boating interests on the lake while assisting Warren in addressing dissolved oxygen concentration in the lower Presumpscot River.¹⁴

The Department found in issuing the WQC that a minimum flow from Sebago Lake of 270 cfs provides reasonable assurance that dissolved oxygen standards will be met in the Presumpscot River below Westbrook under normal conditions. However, the Department recommended that a minimum flow of 400 cfs¹⁵ should be released from Sebago Lake, *in addition to* spillage from the Dundee and Gambo Dams, whenever needed to meet dissolved oxygen standards in the river above Westbrook during the critical summer months (June 1 through September 30). Condition 2F of the WQC requires Warren to continue to monitor dissolved oxygen levels in the river, as required in the April 30, 2003 water quality certification for the Presumpscot River Hydro Projects, to determine whether this flow release, in combination with the spillage currently required at the Dundee and Gambo Dams, is sufficient to meet Class B dissolved oxygen standards in the river from Dundee Dam to Saccarappa Dam under dry weather conditions. WQC at 54.

The Board finds that Appellant Frechette has provided no response to these findings other than to suggest that Warren spill more water at its downstream dams, without suggesting where that water will come from. In fact, it must come ultimately from Sebago Lake, which provides the majority of the flow to the river. In any case, the Board has no authority to impose additional spillage requirements on FERC-licensed downstream dams in this appeal of the WQC for the Eel Weir Hydropower Project. The Board finds the Department's conclusions regarding the recommended minimum flow of 270 cfs from Sebago Lake, with a minimum flow of 408 cfs during critical summer months, to meet applicable water quality standards is supported by the evidence in the record and that these flows provide reasonable assurance that all water quality standards will be met in the Presumpscot River. The operating plan put forth by Warren for water quality certification satisfies these recommended flow rates.

¹³ Letter from Dana Murch, DEP, to Brad Goulet, S.D. Warren, regarding 2010 dissolved oxygen monitoring report for the Presumpscot River Hydro Projects. Eel Weir Record #1696.

¹⁴ Warren's Supplement to Application for New License, June 6, 2011. Eel Weir Record #1760.

¹⁵ DEP utilized a critical low flow of 400 cfs in dissolved oxygen attainment modeling for the middle Presumpscot River. Warren proposed to release a minimum of 408 cfs during the critical summer months as part of its flow-based lake level management plan as revised June 6, 2011 supplement.

12. DISCUSSION OF APPEALS / FISH PASSAGE ISSUES

- A. Anadromous and Resident Fish Passage at the Eel Weir Dam. Condition 6 of the WQC reserves the Department's right to reopen the WQC for consideration of the installation of fish passage facilities upon notification from MDIFW and/or MDMR that circumstances or conditions warrant passage.

In Claim 7, Appellant Watts argues that the Bypass does not meet Class A, B or C water quality standards because it does not support natural self-sustaining populations of native, indigenous brook trout and landlocked Atlantic salmon which historically existed in the river prior to construction of the Eel Weir dam in 1907. In Claim 8 Appellant Watts asserts that the WQC fails to require anadromous and resident fish passage to support natural, self-sustaining populations of indigenous fish in the Eel Weir Bypass and that there is no factual or legal basis not to require fish passage now.

Appellant Watts argues that the ability of the Presumpscot River and Sebago Lake to provide for the protection and propagation of indigenous fish species is central to the Clean Water Act and water quality standards. He argues that native Sebago Lake landlocked Atlantic salmon and brook trout are present in the Bypass but are wholly dependent upon annual stocking by MDIFW; that lack of immediate fish passage for native Sebago Lake landlocked Atlantic salmon and brook trout creates a *de facto* subcategory of Class A that requires a use attainability analysis (UAA); that reservation of authority to require fish passage is an inadequate and unlawful substitute for immediate fish passage; that informal state fisheries management plans do not control water quality certifications; and that the reason MDIFW opposes upstream fish passage at the Project is because of the financial burden to Warren. In support of his argument, Appellant Watts cites, among other things, fish passage conditions contained in the Board's decision on appeal of the water quality certification for Warren's other Presumpscot River hydropower dams.¹⁶

Warren responds that water quality standards do not require fish populations to be self-sustaining, only that habitat be characterized as natural and that the quality of water be sufficient to support indigenous species which both Sebago Lake and the Presumpscot River do through stocking as documented in the WQC. Warren further argues that the law does not require fish passage at all dams and that the re-opener provision is sufficient. Warren states that the water quality certification for Warren's other Presumpscot River hydropower dams does not require immediate fish passage at each of the dams. Rather, it requires the phased installation of passage facilities based upon the number of returning fish at various points along the river. Warren notes that the water quality certification for the Presumpscot River Hydro Projects has been upheld by the Maine Supreme Judicial Court. Warren further states that Appellant Watts' assertion that anadromous and resident fish passage is required at the Eel

¹⁶ S.D. Warren Company Presumpscot River Hydro Projects (# L-191713-33-E-N, L-191714-33-E-N, L-191715-33-E-N L-191716-33-E-N L-191717-33-E-N) Findings of Fact and Order on Appeal (October 2, 2003)

Weir Dam is at odds with the recommendations from the Maine Department of Marine Resources (MDMR) and MDIFW.

Analysis: Anadromous species are those that migrate from the ocean to fresh water to spawn. Examples of anadromous species that were historically present in the Presumpscot River include alewife, American shad, sea-run Atlantic salmon, blueback herring, and rainbow smelt. Resident fish are those species that are able to fulfill their life history requirements within the river and its tributaries. Examples of resident species known to exist in the Presumpscot River include landlocked Atlantic salmon and brook trout.¹⁷

MDIFW provided comments to the Department regarding fish passage at the Eel Weir Dam in a letter dated November 2, 2005.¹⁸ MDIFW discusses the *Draft Fishery Management Plan For the Presumpscot River Drainage, December 2001* which was collaboratively developed by the three fishery agencies having jurisdiction over the State's fishery resources (MDIFW, MDMR and the Maine Atlantic Salmon Commission). The plan is described as a "long-term road map for the development and enhancement of resident and migratory fish within the entire Presumpscot River." MDIFW states that fish passage at the Eel Weir Dam would jeopardize the fishery in the Bypass by allowing stocked fish to exit the Bypass into Sebago Lake and would allow new assemblages of fish to enter the lake thereby altering the ecology of the lake. MDIFW further states that, due to lake bathymetry and ecological considerations, Sebago Lake is not well suited for certain species that are stocked in the Bypass, such as brook trout.

In his argument Appellant Watts cites the Board's decision on appeal of the water quality certification issued by the Department for the continued operation of Warren's Presumpscot River Hydro Projects (Saccarappa, Mallison Falls, Little Falls, Gambo, and Dundee) under new FERC licenses. This certification includes a condition requiring the phased installation of upstream and downstream anadromous fish passage facilities at all five projects, with the first of these facilities to be operational at the Saccarappa Dam no later than 2 years after passage is available at the Cumberland Mills Dam, and with the sequential installation of passage facilities at the upriver dams based on specific numbers of returning fish at each dam. On June 29, 2009, the Commissioner of MDIFW issued an order directing Warren to construct upstream and downstream fish passage facilities at the Cumberland Mills Dam, the first dam on the Presumpscot and not regulated by FERC, by May 1, 2013. WQC at 22. The dam immediately downstream of Eel Weir, at the North Gorham Project, is not owned by Warren and is not subject to anadromous fish passage requirements. The result is that while some of the downstream dams are subject to anadromous fish passage requirements, others are not, and it will likely be many years before anadromous fish are present in the Eel Weir Bypass in numbers that warrant the installation of fish passage. In addition, while some indigenous fish such as landlocked Atlantic salmon may make their way from the lake into the Bypass,

¹⁷ Draft Fishery Management Plan For the Presumpscot River Drainage, December 2001, appended to Letter from Francis Brautigam, DIFW, to Dana Murch, DEP, responding to September 9, 2005 comments from FOSL, November 2, 2005. Eel Weir Record #1222.

¹⁸ Eel Weir Record #1222.

MDIFW documents that there are no self-sustaining populations of landlocked Atlantic salmon in the Presumpscot River.

Thus, the State's fishery management plan for Sebago Lake and the Presumpscot River does not include provisions for anadromous and resident fish passage at the Eel Weir Dam at this time. MDIFW does, however, support the inclusion of a reopener condition that would allow the issue of passage for anadromous and resident fish species to be re-evaluated during the term of a new FERC license for the Project in the event that future circumstances or conditions warrant the installation of a fishway. A reopener provision to consider "requiring the installation of such fish passage facilities as may be deemed necessary to pass anadromous and/or resident fish species, including but not limited to landlocked Atlantic salmon, upstream and downstream through the project area" is included as Condition 6 of the WQC. WQC at 56.

The Board finds that, while the Department's determinations regarding fish passage are not controlled by the fisheries agencies, the Department necessarily relies on these agencies for their expert opinion regarding the suitability of ecological conditions to support indigenous species, including the interaction of different species in the context of fishery management objectives. However, the final decision on compliance with water quality standards rests with the Department.

Nothing in the State's water quality standards necessarily requires installation of fish passage at all dams or that all populations of indigenous species be self-sustaining, without regard to the particular circumstances of the waterbody. Rather, Class GPA and Class A water quality standards require that waters must be of such quality that they are suitable for the designated use of habitat for fish and other aquatic life, with the *habitat* characterized as natural, and of sufficient quality to support all indigenous species. The evidence in the record supports a finding that if the Project is operated as proposed, the water quality conditions in both Sebago Lake and the Presumpscot River, including the Eel Weir Bypass, will support indigenous species of fish and aquatic life and therefore meet applicable habitat and aquatic life water quality standards. The Board also notes that phased fish passage installation requirements that are implemented through re-opener provisions, including those imposed on Warren's downstream dams on the Presumpscot River, have been upheld against legal challenge by the Maine Supreme Judicial Court. *S.D. Warren v. Bd. of Env'tl. Prot.*, 2005 ME 27, ¶ 23-28, 868 A.2d 210, 218-220. Installation of anadromous or resident fish passage at the Eel Weir Dam is not currently necessary to ensure the applicable standards are met, and the re-opener provision in the WQC ensures that the issue can be addressed in the future as circumstances warrant. The Board finds that installation of anadromous or resident fish passage at the Eel Weir Dam is not currently necessary to ensure the applicable standards are met.

- B. American Eel Passage at Eel Weir Dam. Conditions 4A and 5A of the WQC provide for upstream and downstream eel passage, respectively. Appellant Frechette argues in his appeal that requiring upstream and downstream passage for American eel "does not make sense" with respect to fisheries management objectives for the Eel Weir Bypass, Sebago Lake and the Crooked River, a tributary to the lake, because eels are predators.

Warren did not respond to this specific comment.

Analysis: Both the MDIFW and MDMR support passage provisions in the water quality certification necessary for the restoration of American eel.¹⁹ MDMR stated that its management goal is to obtain efficient upstream and downstream passage measures for the American eel at the Eel Weir Project, and that the documented presence of eels above and below the Project constitutes sufficient need for passage requirements.²⁰ In its Final Environmental Assessment (FEA), FERC found that the American eel is a species of considerable interest to state and federal agencies and that a multi-state/federal effort is currently underway to protect and restore the species to its former range and abundance including the Presumpscot River drainage. State and regional management plans call for maintaining or enhancing eel abundance in the Presumpscot and other rivers through the protection or restoration of habitat and improved passage at all barriers.²¹ MDIFW documents that the Presumpscot River currently supports a sizable population of catadromous American eel.²²

The Board finds that management goals of the state's fishery management plan for the Presumpscot River basin include providing migratory routes and habitat for catadromous American eel. Eels, like most fish, are predators of some species while serving as prey for others. The commenting fisheries agencies were well aware of the eel's place in the food chain when they formulated their conservation plans and drafted their comments to the Department. The record shows that self-sustaining populations of American eel are present in the Eel Weir Bypass and Sebago Lake. Improved passage to Sebago Lake will enhance abundance and restore habitat to this species of state and federal interest.

Therefore, the Board finds that the requirement for upstream and downstream eel passage at the Eel Weir Dam is appropriate notwithstanding the fact that eels are predators of certain other species.

- C. Sebago Lake Fisheries and Fall Outflow Cap of 1,000 cfs. In Claim 15 Appellant Watts asserts that the WQC unlawfully requires an outflow cap of 1,000 cfs at the Eel Weir Dam from October 16 through November 15 annually to dissuade landlocked Atlantic salmon and brook trout from migrating to the lake outlet to spawn and to increase the likelihood that salmon will return to MDIFW's salmon broodstock collection site at Jordan River. He also argues that this flow cap will "severely diminish the effectiveness of downstream adult American eel passage" and will "prevent Sebago Lake from behaving naturally."

¹⁹ Eel Weir Record #1222.

²⁰ Letter from George Lapointe, Commissioner, MDMR, to Dana Murch, DEP, providing comments on application for water quality certification for the Eel Weir Project, July 1, 2002. Eel Weir Record #754.

²¹ Federal Energy Regulatory Commission notice of availability of Final Environmental Assessment for Project No. 2984, with attached FEA, November 29, 2005. Eel Weir Record #1229, pp. 96-97.

²² Eel Weir Record #1222.

Warren responds by stating that Appellant Watts' assertion is based on a misunderstanding that an outflow cap would not be needed if fish passage was installed at the Eel Weir Dam. However, Warren notes that water quality standards do not require immediate fish passage at all dams in all cases. It is not whether the flow cap is "natural" but whether habitat is characterized as natural. Given that MDIFW believes a flow cap of 1,000 cfs is needed to prevent landlocked Atlantic salmon from leaving the lake in fall, Warren states it is appropriate to include such a condition in the WQC to ensure lake waters are suitable for the designated use of habitat for fish.

Analysis: Warren proposed in its lake level management plan to cap Project outflow at 1,000 cfs during the period of October 16 through November 15 annually.²³ With respect to landlocked Atlantic salmon spawning, MDIFW stated that it supports Warren's proposed flow cap of 1,000 cfs during this period to reduce the number of salmon straying from the Jordan River, which is where MDIFW maintains a salmon collection facility used to enhance the landlocked salmon fishery in Sebago Lake.²⁴ The WQC included Warren's recommended and MDIFW-supported fall lake outflow cap of 1,000 cfs to assist in achieving fishery management objectives.

The Board finds that Appellant Watts' arguments are predicated on a misunderstanding of the water quality standards for lake water levels, river flows and fish passage. As discussed elsewhere in this order, nothing in the water quality standards requires that lake levels be natural or identical to pre-dam levels, that stream flow in the Eel Weir Bypass be natural, or that fish passage be immediately installed at all dams. The water quality standards for Class GPA and Class A require that habitat for fish and aquatic life be characterized as natural with natural meaning "living in, or as if in, a state of nature not measurably affected by human activity." Arguments that the flow cap will interfere with eel passage are not supported by the fact that such a flow cap has been in place since issuance of FERC's 1997 Order Approving Settlement and Amending License and there are abundant numbers of American eel in both the Presumpscot River and Sebago Lake. The Department determined that Warren's proposal to operate its Project will support aquatic life both in Sebago Lake and the Presumpscot River, including Eel Weir Bypass. The Board agrees. The Board finds that Warren's proposed lake level management plan and associated minimum flow release plan, including the 1,000 cfs outflow cap intended to assist in fishery management objectives for Sebago Lake, do not violate water quality standards.

13. DISCUSSION OF APPEALS / SEBAGO LAKE

- A. Overview of Lake Level Issues. As summarized in Section 7 of this order, Condition 1A of the WQC under appeal requires that Sebago Lake water levels be managed within a target range of 266.65 feet msl and 262.0 feet msl with a goal of achieving a lake level of 266.0 feet msl (0.65 feet below spillway crest elevation) between May 1 and June 15 annually. Both Appellant

²³ Eel Weir Record #1760.

²⁴ Letter from Francis Brautigam, DIFW, to Kimberly D. Bose, Secretary, FERC, commenting on supplement to Eel Weir Project application, July 17, 2011. Eel Weir Record #1775.

Watts and Appellant Frechette object to the target lake level range, but for different reasons. Appellant Watts argues that the lake level range established in the WQC is not natural (Claims 9 and 10), that higher than natural levels contribute to erosion of the shoreline (Claim 11) and sedimentation to the lake (Claim 13), and that the failure to allow the lake level to drop to natural low levels prevents natural beach rebuilding and degrades recreational uses in violation of the antidegradation provisions of Maine's water quality law (Claim 12).

Appellant Frechette argues that the lower lake level of 262 ft msl is too low; fails to treat Sebago Lake in the same manner as other significant lakes such as Moosehead; adversely affects the designated uses of recreation, navigation and habitat for fish and other aquatic life; and inappropriately subordinates water quality in Sebago Lake to that in the Presumpscot River.

- B. Interpretation of Class GPA Water Quality Standard. Appellant Watts asserts in Claim 9 of his appeal that the upper lake level target of 266.65 feet msl is unlawful because it is "well above the natural high water level of Sebago Lake," "has no basis in fact or law," and is "unenforceable and meaningless." He asserts that the only lawful upper water level is the natural high water level, the best estimate of which is 265 feet msl. He further states that the goal of achieving a level of 266.0 ft msl between May 1 and June 15 each and every year is inappropriate because it would never happen in nature. He states that water levels maintained above the natural high and for longer periods of time in summer and fall result in shoreline erosion with damage to the beaches at Sebago Lake State Park and other properties around the lake. Appellant Watts also argues in Claim 10 of his appeal that the lower bound of the lake level target range of 262.0 feet msl has no basis in fact or law. He claims that the natural low water level of Sebago Lake is 258 feet msl and that the natural range in water levels at Sebago Lake was 258 feet msl to 265 feet msl.

Warren responds that Appellant Watts chooses to ignore State water quality law as it pertains to Class GPA and focus instead on his assertions that only natural water levels are allowed. Warren responds that Appellant Watts' argument "makes no sense because it would mean that dams that control lake levels are not allowed." Warren quotes the WQC at 50-51:

Mr. Watts' basic argument is that there can be no unnatural fluctuations of the water levels of Class GPA lakes or of the flows of Class A rivers. Taken to its logical conclusion, this argument would require the remove of all dams at the outlet of Maine lakes, which Mr. Watts admits at one point in his comments, when he states that "[t]he only way in which Sebago [Lake] can be legally 'managed' under Class GPA standards is to remove the Eel Weir Dam and allow Sebago Lake to function as it has for the past 10,000 years as a natural glacial lake with a natural, free-flowing outlet." There is nothing in Maine's water quality standards that compels such a radical outcome.

Warren states that Class GPA does not require water levels to be natural; rather, habitat must be characterized as natural. Warren argues that the aquatic habitat in Sebago Lake under the management regime set forth in the WQC can be characterized as if it were in a state of nature not measurably affected by human activity.

Analysis: As stated previously, Class GPA waters must be of such quality that they are suitable for the designated uses of drinking water after disinfection, recreation in and on the water, fishing, agriculture, industrial process and cooling water supply, hydroelectric power generation, navigation and as habitat for fish and other aquatic life. The *habitat* must be characterized as natural. To support aquatic life, Class GPA waters shall have a stable or decreasing trophic state subject only to natural fluctuations as measured by chlorophyll "a" content, secchi disk transparency, total phosphorus content and other appropriate criteria. 38 M.R.S.A. § 465-A(1)(B). Nothing in the State's water quality standards mandates that lake water levels be managed to replicate natural lake levels that existed prior to construction of the impounding dam.

The Board finds that, contrary to Appellant Watts' assertion, the standards for Class GPA waters require *habitat* not *lake levels* to be natural. That is, water quality standards do not require that a lake level be equivalent to the lake levels that existed prior to construction of the impounding dam. The Department's interpretation of Class GPA water quality standards is consistent with the plain language of the statute, the fact that hydroelectric power generation is a designated use of GPA waters, and the Board's long-standing interpretation of the State's water quality standards. Notwithstanding the lack of a requirement for water levels on Sebago Lake to be as they were prior to construction of the outlet dam, the Board notes that the Department documented in the WQC that "natural" lake levels varied between a minimum of about 256 feet msl and a maximum of about 258 feet msl prior to the construction of any dams at the outlet of Sebago lake. The Board finds that Appellant Watts' interpretation of the State's Class GPA water quality standards regarding lake levels is legally unfounded.

C. Upper Lake Level Target

- (1) Erosion. Appellant Watts asserts in Claims 10 and 11 that maintenance of the lake level at higher than the historical norm has destabilized the shoreline causing severe erosion at Sebago Lake State Park and elsewhere along the shoreline in violation of State water quality standards for waterbodies in state and national parks.

Warren responds that the proposed lake levels authorized by the WQC meet Class GPA water quality standards. Warren states that evidence in the record indicates that erosion has stabilized. Warren further states that the mere fact that there may be some beach erosion does not mean that water quality is not maintained and protected at the State Park.

Analysis: The upper lake level target of 266.65 feet msl was initially established in FERC's Order Approving Settlement and Amending License issued on April 21, 1997. The upper lake level is the height of the spillway crest of the Eel Weir Dam. The upper lake level is a component of the State of Maine's 1996 compromise water level management plan for Sebago Lake that was developed by the Departments of Conservation, Environmental Protection, and Inland Fisheries and Wildlife, with majority support from various lake groups and entities having an interest in Sebago Lake levels.²⁵ FERC found in its Final Environmental Impact Statement, January 1997²⁶ that the settlement plan would result in erosion rates that are similar to historic rates, would provide increased benefit for wetland resources, and would provide increased benefit for recreational boating opportunities during late summer and early autumn. The plan was accepted by Warren, the Portland Water District, Friends of Sebago Lake, Sebago Anglers Association, Sebago Lake Boating Club, Sebago Lake Landowners and Users Coalition, Sebago Lake Marinas Association, Maine Marine Trades Association, Maine State Bass Federation, and Frye Island Corporation.²⁷

Several shoreline and beach erosion studies have been conducted on Sebago Lake since the early 1990s,²⁸ including a five-year long Sebago Lake Beach Profile Study contracted by Warren. The Department considered the results of beach studies conducted around Sebago Lake concluding in the WQC that:

Virtually all of the 105 miles of shoreline around Sebago Lake is currently stable and is not experiencing significant erosion. Those areas currently subject to erosion are predominantly steep bluffs composed of loose sands and gravels that are inherently unstable. Most erosion-prone shoreline areas have already been protected by retaining walls or riprap and have been stable for many years, despite changing lake levels. However, the shoreline of the lake is still in the process of coming into equilibrium with the higher water levels created by the construction of the outlet dam to its current elevation. As a result, both shoreline erosion and beach recession will continue in the future. WQC at 36.

²⁵ Letter from Edward Sullivan, DEP, Ronald Lovaglio, DOC, and Ray Owen, Jr., DIFW, to Lois D. Cashell, Secretary, FERC, proposing compromise water level management plan for Sebago Lake, August 16, 1996. Eel Weir Record #382.

²⁶ Federal Energy Regulatory Commission, Final Environmental Impact Statement, Eel Weir Hydroelectric Project, No. 2984, January 1997. Eel Weir Record #409.

²⁷ Eel Weir Record #382.

²⁸ See Sebago Lake Beach Profile Study 2001 Work Report, prepared for S.D. Warren Company by Framatome ANP, Inc., April 2003, p. 8 for a summary of previous studies. Eel Weir Record #8.

This conclusion was based on an evaluation of study data collected by the Maine Geological Survey²⁹ and Warren³⁰ between 1993 and 2002.

There is no dispute that shoreline erosion occurs at Sebago Lake, and photographic evidence presented by Appellant Watts and contained in the record demonstrates this natural phenomenon occurs. The Sebago Lake Beach Profile Study 2001 Work Report concludes that beach profiles are generally stable with some accretion and erosion occurring seasonally in response to extreme weather events. Significant erosion has occurred during extreme weather events when lake levels were high. These findings comport with findings made by the Maine Geological Survey in their 1994, 1997 and 1998 reports on beach and shoreline studies.³¹ However, the Department's assessment³² of Sebago Lake water quality is that the lake exhibits no clear linear trend of declining water quality, concluding that the water level management practices in recent years have not been shown to have any considerable effect on the water quality of Sebago Lake.

The Board finds that although the Sebago Lake shoreline experiences erosion in areas, erosion and sedimentation resulting from lake water levels has not been shown to cause measurable or documented adverse impacts to overall water quality. In fact evidence in the record indicates that the water quality of Sebago Lake is considered good to excellent and the lake supports both indigenous coldwater and warmwater fish species, including a nationally recognized landlocked Atlantic salmon fishery.³³ The record contains sufficient documentation that Class GPA water quality standards, including the designated use of habitat for fish and aquatic life, are met under a lake level plan utilizing an upper target of 266.65 feet msl.

The Board further finds that the lake level targets set forth in Warren's proposed flow-based lake level management plan are intended to recognize and maintain all designated uses in and downstream of Sebago Lake, and that there is reasonable assurance that this plan will meet all applicable water quality standards. The new FERC license will incorporate, at a minimum, the terms and conditions of the WQC including, but not limited to, the lake level targets. Condition 7 of the WQC appropriately reserves the Department's right, after notice to the applicant and

²⁹ Memo from Robert Marvinney, Maine Geological Survey, DOC, to Ron Lovaglio, DOC, and Ned Sullivan, DEP, with attached report titled "Beach Dynamics of Sebago Lake: A Report on the Results of Beach Profiling," by Robert A. Johnson and Martha N. Mixon, Maine Geological Survey (Open-File 98-122), August 21, 1998. Eel Weir Record #477.

³⁰ Sebago Lake Beach Profile Study 2001 Work Report, prepared for S.D. Warren Company by Framatome ANP, Inc., April 2003. Eel Weir Record #8.

³¹ Eel Weir Record #8, p. 8.

³² Memo from Roy Bouchard (DEP) to Dana Murch (DEP) regarding Sebago Lake trophic trend, July 6, 2011. Eel Weir Record #1798. The assessment is based on data from various sources, including, but not limited to, the Portland Water District, an independent review by a third party water quality expert.

³³ Eel Weir Record #1229, p. 91, and #81, "An Evaluation of Perceived Impacts to Fish and Wildlife Associated with Water Level Management at Sebago Lake During the Summer and Fall of 1991," prepared by Sonny Pierce & Warren Eldridge, DIFW.

opportunity for hearing, to reopen the certification, upon any future determination by the Department that the water quality of Sebago Lake is declining, for consideration of requiring such modification of the lake level management plan in effect for the Project as maybe deemed necessary to ensure that the operation of the Project does not cause or contribute to any decline in the water quality of Sebago Lake.

- (2) Anti-Degradation Provision. Appellant Watts asserts in Claim 12 that the target lake levels violate the anti-degradation provision of the U.S. Clean Water Act and Maine water quality standards by degrading existing recreational uses of the lake. He argues that the higher than normal lake levels have resulted in the narrowing of beaches at Sebago Lake State Park due to erosion as discussed in Section 11C(1) above. Additionally, periodic low fall levels are critical to beach accretion and the re-building process. He argues that the antidegradation policy does not apply to existing uses which “arise from, and are dependent upon, an artificial increase in the natural height of a waterbody.” Instead, he argues that one legally designated use of Sebago Lake is “for the public to swim and recreate along the lakes natural shores and beaches in their *natural* condition” and that the antidegradation policy protects those pre-dam conditions.

Regarding the matter of antidegradation, Warren responds that it makes no sense to assert the antidegradation policy applies only to uses which arise from the waterbody in its *natural* condition. Such an interpretation would mean that dams could not exist in Maine because they change natural conditions. Warren further argues that “in any case, the use protected by the antidegradation policy is ‘recreation’ such as swimming and boating, not beach use.”

Analysis: Appellant Watts cites a provision of the State’s antidegradation policy which states, “Where high quality waters of the State constitute an outstanding national resource, that water quality must be maintained and protected. For purposes of this paragraph, the following waters are considered outstanding natural resources: those water bodies in national and state parks and wildlife refuges; public reserved lands; and those water bodies classified as Class AA and SA waters pursuant to section 465, subsection 1; section 465-B, subsection 1; and listed under sections 467, 468 and 469.” 38 M.R.S.A. § 464(4)(F)(1-A)(2).

Aside from the fact that Sebago Lake as a whole is not located within a state park, the existing water quality of the lake is in fact maintained and protected by the proposed operation of the Project, including the lake level management plan as modified by the WQC. The designated uses of Class GPA waters include habitat for fish and aquatic life and recreation in and on the water. While a particular water level regime may result in some beach erosion, nothing in the State’s water quality standards requires that erosion be eliminated except to the extent that eroding soils affect the quality of the lake water and its ability to support aquatic life and recreation in and on the water such as swimming and boating. Erosion can be a natural habitat-forming process.

The Board finds that the antidegradation policy requires consideration and protection of certain existing uses, not uses of the water body in its natural, pre-dam condition. As discussed above, evidence in the record indicates that water quality sufficient to support these existing uses, including recreation in and on the water, is being maintained. The Board finds that the lake level management plan as modified by the WQC will protect existing recreational uses of Sebago Lake and does not violate the antidegradation provision of the State's water quality law.

- (3) Sedimentation. In Claim 13 Appellant Watts asserts that erosion due to high target lake levels "violates Maine water quality standards by causing soil and other materials to fall and wash into Sebago Lake."

Warren responds that the statute Appellant Watts cites prohibits the placement of materials on or removing materials from the shores of a lake in such a manner that the materials may be washing into the water. It does not address erosion caused by wave action.

Analysis: The statute Appellant Watts refers to states, "Materials may not be placed on or removed from the shores or banks of a Class GPA water body in such a manner that materials may fall or be washed into the water or that contaminated drainage may flow or leach into those waters, except as permitted pursuant to section 480-C." 38 M.R.S.A. § 465-A(1)(C).

The Board finds that this statutory provision applies to the placement or removal of materials on the banks of a Class GPA water body, not to erosion due to lake water levels. Warren has not proposed to place or remove materials from the banks of Sebago Lake in its proposed operation of the Project, therefore 38 M.R.S.A. § 465-A(1)(C) does not apply.

- D. Lower Lake Level Target. Appellant Watts asserts that "the lower bounds of the lake level target range of 262.0 feet msl is harmful to beach accretion and natural beach rebuilding by ice bulldozing and fair weather long-shore wave action," and that it is "inconsistent with the expert opinion and testimony of the Maine Geological Survey." Appellant Watts asserts that the natural low water level of Sebago Lake is 258 feet msl.

Warren responds that Appellant Watts' assertion regarding lower lake levels is largely a repeat of his claims regarding upper lake levels and that he misses the point of the question at hand: Does the lake level meet Class GPA water quality standards?

Analysis: The reference Appellant Watts makes to "the expert opinion and testimony of the Maine Geological Survey" is from comments provided in 2005. More recently, the Maine Department of Conservation's Maine Geological Survey commented to FERC that, "The 2-in-9 year requirement in the current LLMP to lower the fall lake level to 261 feet MSL should be eliminated. The intention of this requirement was to promote transport of sand up the beach from deeper areas around the shoreline as water levels rose during spring snowmelt. In

practice, this target has been elusive for a number of reasons, not the least of which has been the frequency of late fall rain events in the past ten years. Furthermore, while the Maine Geological Survey has noted sand run-up on Sebago Lake State Park beaches following successful lowering of the lake to the 261-foot target, the volume of sand so moved has been insufficient to have a significant impact on the beaches of Sebago Lake State Park.³⁴ The Department determined that the 2-in-9 provision that was part of the LLMP is not required to assure the operation of the Project meets applicable water quality standards.

The Board finds that the 2-in-9 year requirement of a lower lake level target of 261.0 feet msl is no longer recommended by the Maine Geological Survey. Nothing in the State's water quality standards mandates that lake water levels be managed to promote beach accretion and natural beach re-building. As discussed above, Class GPA standards require that the water quality of the lake support designated uses, including habitat for fish and aquatic life and recreation in and on the water. The Board finds that there is no requirement in law that the lake level be managed in an effort to promote beach accretion at Sebago Lake State Park. The Department appropriately found in issuing the WQC that there is reasonable assurance that the lower lake level of 262.0 feet msl will not violate Class GPA water quality standards.

- E. Effect of Low Lake Levels on Recreational Boating and Navigation. Appellant Frechette asserts that Class GPA water quality standards for the designated uses of recreation in and on the water and navigation are not met at lake levels below 263.5 feet msl. He states that the mouth of the Northwest River and the mouth of the Songo River, two tributaries to Sebago Lake, are at elevation 259.5 feet msl. He further states that waterways must have 4 feet of water to be marked as navigable and that a low water level of 262.0 feet msl will make these waters unnavigable. He also states that access to Turtle Cove is cut off at a lake elevation of 262.0 feet msl. Regarding navigational access to Frye Island, Appellant Frechette states that heavy vehicles are prohibited access to the Frye Island ferry when lake levels reach 263 feet msl and that the island continues to advocate for a lake level of 263 feet msl on November 1st of each year.

Warren responds generally to this comment by stating that the revised lake level management plan that was approved by the WQC is a compromise intended to balance designated uses, including recreation in and on the water, navigation, downstream water quality, fishing and power generation. Warren states that the fact that neither appellant is entirely happy with the lake level management plan's compromise does not mean that it does not meet water quality standards.

Analysis: In 2001, Warren conducted an assessment of the effects of lake levels on recreational resources and summarized its findings in *Recreational Resources Report, S.D. Warren Company, Eel Weir Project FERC No. 2984, January 2002*. The report is included in Volume III – Appendix D of Warren's application to FERC for a new

³⁴ Letter from Robert Marvinney, DOC, to Kimberly D. Bose, Secretary, FERC, commenting on supplement to application for new license for Eel Weir Project, July 8, 2011. Eel Weir Record #1801.

license.³⁵ Warren followed this with *Sebago Lake Recreational Use Monitoring 1998 – 2002, February 2003*.³⁶ The 2003 report provides an assessment of recreational use data collected from 1997-2002. The report concludes that lake levels resulting from the lake level management plans in place since 1997 have not had a direct effect on recreational use of the lake. This assessment takes into consideration recreational boating activity.

Additionally, FERC evaluated ice-out and lake level data for the period of 1997 to 2002 to determine whether either of these conditions compromised boating access on April 1st, which is considered the start of the fishing season. FERC concluded that the lake level was not conducive to boating access on April 1st just once during the five-year period, and that that event was attributable to the 2-in-9 year lake level drawdown.³⁷

The Town of Frye Island stated the lowest lake level that the Town could safely load the standard fire truck currently used for fire protection on the island is 262 feet msl and requested that the Department consider a lake level management plan that provides for a lake level above elevation 262 feet msl during the months of April through November.³⁸ The Department addressed this issue in the WQC noting that the record does not contain evidence that emergency vehicles have not been able to reach the island when necessary and that the Town has the option of stationing a fire truck on the island.

In accommodating the water quality needs of the various designated uses for Class GPA waters, the Department found that there is a reasonable assurance that Warren's proposed flow-based lake level management plan, which includes a low lake level target of 262.0 feet msl, will not violate applicable water quality standards.

In response to comments received on the draft WQC from Charles M. Frechette, on behalf of Sebago Lake Marina, the Department modified the draft WQC to include a new lake level target goal of 266.0 feet msl between May 1 and June 15 annually³⁹ intended to ensure lake levels remain suitable for recreational boating during the normal boating season of May through October.⁴⁰ This interim lake level target was proposed by Warren but not included as a condition of the draft WQC.

The Board finds that in evaluating lake levels in a water quality certification, the Department must protect the water quality requirements of all designated uses. Although FERC stated in its 2005 Final Environmental Assessment that the "proper lake elevation"

³⁵ Eel Weir Project, Application for New License, Volume IV, submitted to the Federal Energy Regulatory Commission by S.D. Warren Company, March 2002. Eel Weir Record #4.

³⁶ "Sebago Lake Recreational Use Monitoring," prepared for S.D. Warren by Normandeau Associates, February 2003. Eel Weir record # 836.

³⁷ Eel Weir Record #1229, pp. 178-179.

³⁸ Letter from Wayne Fournier, Town Manager, Town of Frye Island, to Dana Murch, DEP, commenting on Sebago Lake water levels, August 23, 2011. Eel Weir Record #1834.

³⁹ Condition 1(A) of the WQC.

⁴⁰ Recreational boating information provided in FERC's Final Environmental Impact Statement, Eel Weir Hydroelectric Project, No. 2984, p. 4-29. Eel Weir Record #409.

to launch a boat on Sebago Lake is 263.5 feet msl,⁴¹ the Board finds a lake level of 262.0 feet msl does not mean that the designated uses of recreation in and on the water and navigation are not met. The draft WQC was modified in response to Appellant Frechette's concerns to include a target lake level of 266.0 feet msl between May 1 and June 15 in an effort to keep lake levels high through the boating season and help ensure that heavy vehicle access to Frye Island is maintained into the fall. However, the actual lake level achieved at any point in time is influenced not only by outflow rates but also by the amount of precipitation received, and no management plan can guarantee a specific lake level over a specific interval of time. Further, the fact that the waters of Sebago Lake are also used for the designated use of hydroelectric power generation means that there will be a drawdown of the water level to accommodate this use. One consequence of this drawdown may well be that some tributaries and coves may become too shallow to accommodate some forms of recreational boating at certain times of the year. However, such limitations on use do not mean that the waterbody fails to meet water quality standards. In the event conditions become severe, the Conditions of the WQC provide for deviation from the minimum flow rates in response to, among other things, extreme hydrologic conditions. Thus, the Board finds that Appellant Frechette's assertion that the designated uses of recreation in and on the water and navigation are not met at lake levels below 263.5 feet msl is not supported by the information in the record.

- F. Effect of Minimum Flow on Lake Level. Appellant Frechette argues that the increase in the instantaneous minimum flow from the Project to the Presumpscot River, coupled with the elimination of a number of target lake levels for various points in time throughout the year, ensures that the lake will be lower than in the past and will reduce the lake level to 262.0 feet msl in the middle of the open water (boating) season with adverse impacts to recreation, navigation, and habitat for fish and other aquatic life.

Warren responds that replacing *required* lake levels at various times during the year with *targeted* lake levels does not mean that the lake levels will fall to 262.0 feet msl in the middle of the open water boating season. Warren states that the early summer lake level target of 266.0 feet msl is intended to ensure that the lake will not drop to the low level during the recreational boating season.

Analysis: The current lake level management plan approved by FERC in 1997 contains a lake level compliance point of 262.5 feet msl +/- 0.5 feet msl on November 1st annually. The WQC requires that Sebago Lake water levels shall be managed within a target range between 266.65 feet msl and 262.0 feet msl with lake levels above or below this range triggering increased or decreased flow releases, respectively, from the Eel Weir Dam to the Presumpscot River, with the goal of achieving a level of 266.0 feet msl (0.65 feet below spillway crest elevation) between May 1 and June 15 annually. Under Warren's proposed flow-based lake level management plan, the low lake level is a target rather than an absolute value for a specified date. In its application, Warren stated it believes, based on nearly 14 years of experience

⁴¹ Eel Weir record #1229, p. 180.

operating under the existing lake level management plan,⁴² that a flow-based lake level management plan will be beneficial to both lake and river interests.

In consideration of all study data available for Sebago Lake as provided in Warren's Application for New License for the Eel Weir Project, including but not limited to, those regarding fish and wildlife habitat, lake water quality, recreational use, and shoreline erosion, the Department found that there is reasonable assurance the lower lake level of 262.0 feet msl will not violate State water quality standards.

The Board finds that Appellant Frechette has not provided persuasive evidence that the lake level will drop to the low point of 262.0 feet msl during the open water season under normal conditions or that, if it does, that water quality standards will not be met.

- G. Effect of Lower Lake Level on Aquatic Habitat. Appellant Frechette asserts that Class GPA water quality standards are not met at lake level 263.5 feet msl (and below) for the designated use of habitat for fish and other aquatic life. 38 M.R.S.A. § 465-A(1)(A). Appellant Frechette argues that the water level for Sebago Lake should be managed as it is for lakes such as Moosehead Lake and Winnepesaukee Lake, which are maintained within a narrower range of water levels. He states that the management plan approved in the WQC conflicts with what he terms "best management practices" for Maine and New England lakes. He suggests that Sebago Lake should be managed, as recommended at one time by the U.S. Fish and Wildlife Service (USFWS), such that it does not fluctuate more than 2 feet between April and December 15 and not more than 3 feet between December 16 and March 31 of each year. In support of his position, Appellant Frechette cites a 1995 letter from MDIFW to Warren stating that water levels below 262 feet msl seriously affect dissolved oxygen levels and hence fish habitat at Turtle Cove and which recommends a winter drawdown of 263 feet msl. He also cites a July 28, 2003 letter from MDIFW to FERC stating that a lack of suitable year-round habitat resulting from winter drawdowns is likely responsible for lower than expected populations of warmwater fish species at Kettle Cove, Songo River and Muddy River. Appellant Frechette also argues that water levels below 263.5 feet msl dewater and damage wetlands bordering the lake and promote the spread of invasive milfoil.

With respect to wetland impacts, Warren responds that it has conducted numerous studies of the impact of the current LLMP on wetlands and water quality and found no adverse affects as a result of its implementation. Warren states that the revised plan approved in the WQC will provide for more natural lake levels and be even less likely to affect wetlands. With respect to conditions in Turtle Cove, Warren responds that the dissolved oxygen demands in Turtle Cove need to be balanced against the need for dissolved oxygen in the Presumpscot River. Warren further comments that the lake level management plan complies with the Department's 3/4ths wetted width policy which is intended to approximate "natural" littoral lake habitat.

⁴² Eel Weir Record #1760.

Analysis: The unique characteristics of lakes and ponds in Maine do not allow for a “one size fits all” approach when determining whether a certain lake level management plan will meet water quality standards. For Sebago Lake, the Department determined that aquatic life and habitat standards are met with a lake level management plan that utilizes 266.65 feet msl and 262.0 feet msl as the upper and lower target levels. The lake level management regimes for other Maine and New England lakes are not necessarily an appropriate model for ensuring compliance with water quality standards at Sebago Lake and the Presumpscot River.

Appellant Frechette’s cites FERC’s Final Environmental Assessment for Hydropower License, November 29, 2005 in which the USFWS’s recommendations on water levels are documented. This is but one suggestion of a virtually limitless number of lake level management plans that could meet water quality standards. The USFWS recommendation was not one that FERC staff recommended for adoption,⁴³ and was not included in Warren’s application for water quality certification.

The Board finds that, as discussed above, water quality standards require that habitat be characterized as natural for Class GPA waters. The Department evaluated Warren’s proposed lake level management plan along with wetlands monitoring data from 1999-2002 and determined that water quality standards, including all designated uses for Sebago Lake, are met with minimum and maximum target levels ranging from 262.0 feet msl to 266.65 feet msl. This determination includes the designated uses of recreation in and on the water and habitat, which includes wetland habitat in and around the lake. With respect to the occurrence of variable milfoil, the Board notes that it grows over a range of water levels and substrate types, beyond the range of water levels proposed in this WQC, and there is no clear evidence that the lake level management plan has contributed to its growth or spread in Sebago Lake. Requiring the higher lake levels that Appellant Frechette seeks would necessarily come at the expense of maintaining other designated uses of Sebago Lake and the Presumpscot River, and the Department must recognize the needs of all of these uses in evaluating a proposed lake level management plan in its WQC. The Board rejects Appellant Frechette’s position as one that elevates the interests of certain recreational boating interests over all others.

- H. Lower Lake Level for Beach Enhancement. Appellant Frechette asserts that the lake level is being lowered to allow the sandy bottom of the lake to serve as beach area at parks located on Sebago Lake.

Warren did not respond to this specific comment.

Analysis: Nothing in State water quality standards requires and nothing in the administrative record indicates that the proposed lake level management plan, as incorporated in the WQC, is intended to provide beach area by dewatering Sebago Lake.

⁴³ Eel Weir Record #1229, p. 233.

The Board finds that the minimum target lake level of 262.0 feet msl proposed by Warren was properly determined by the Department to meet all applicable water quality standards. Nothing in the administrative record suggests that the lower water level target is designed or intended to dewater portions of the lake for the purposes of utilizing lake bottom as beach area at parks located on Sebago Lake. The lake level management plan incorporated in FERC's 1997 and 2000 orders contain a lake level of 262.0 feet msl +/- 0.5 feet msl during the period of August 1 to November 1 of each year. Thus, the lower lake level associated with the WQC is not different than the lower lake level requirement that has been in place since the original lake level management plan was put into effect by FERC. The Board finds that Appellant Frechette has not presented any persuasive evidence that the Department improperly considered factors other than the applicable water quality standards in evaluating whether the proposed operation of the Project would meet those standards at Sebago Lake and other affected water bodies.

14. DISCUSSION OF APPEALS / ADDITIONAL ARGUMENTS

- A. Temperature-Based Flow Regulation Curve. Appellant Frechette questions why the temperature-based flow regulation curve was eliminated from the new lake level management plan.

Warren did not respond to this specific comment.

Analysis: The purpose of the temperature-based flow regulation curve is discussed on page 29 of the WQC. "In order to meet Class C and Class SC standards in the Presumpscot River below Westbrook, the DEP required in its July 9, 1998 renewal of the wastewater discharge license for the Westbrook pulp and paper mill that Warren release water from Sebago Lake in accordance with a final temperature based flow regulation curve. This curve established the instantaneous and monthly-average flows from Sebago Lake needed to meet dissolved oxygen standards in the lower river as a function of water temperature."

In 1999, Warren ceased pulping operations at its Westbrook mill which reduced pollutant loading to the river, and in 2002 the Smelt Hill dam in Falmouth was removed improving hydraulic conditions (reaeration). Consequently, a new model run was conducted in 2011⁴⁴ to determine how these changes affected water quality. The recalibrated model indicated that the temperature-based flow regulation curve was no longer needed to meet Class C and SC water quality (dissolved oxygen) standards below Westbrook.

The Board finds that the temperature-based flow regulation curve was not eliminated through the issuance of the WQC; rather it was deemed unnecessary by the Department in 2011 following updated river modeling under improved river conditions.

⁴⁴ Email from Peter Newkirk, DEP, to various addressees, with attached final Presumpscot River Water Quality Model Recalibration and Status Report, August 16, 2011. Eel Weir Record #1824.

- B. Hydropower Generation. Appellant Frechette asserts that quantifying the amount of increased hydroelectric power generation at the Eel Weir Project and all six downstream projects is an important component of the decision-making process for the water quality certification, and the Department failed to do so.

Warren did not respond to this specific comment.

Analysis. One of the designated uses of Class GPA waters is hydroelectric power generation. 38 M.R.S.A. § 465-A(1)(A). Nothing in State water quality law requires the Department to quantify the amount of increased or decreased power generation at a hydropower project during the water quality certification process. Rather, the Department must ensure the proposed operation of a project will not violate water quality standards, including the designated uses ascribed to each class, including hydropower generation in this case. The Department found in issuing the WQC that the designated use of hydropower generation as well as the other designated uses of the Presumpscot River and Sebago Lake will be maintained.

The Board finds that the Department was not required to consider impacts of the proposed project operation on hydropower generation aside from ensuring that water quality is sufficient to meet this designated use, which it did.

- C. Other Issues on Appeal. To the extent Appellant Watts and Appellant Frechette have raised any other issues, the Board finds that those issues are not germane to the governing regulatory standards or otherwise should be rejected for the same reasons set forth in the discussion above.

15. INCORPORATION BY REFERENCE

All of the findings of fact of the Department's Order of #L-19937-33-J-N issued on August 30, 2011 are hereby incorporated by reference.

BASED ON THE ABOVE FINDINGS OF FACT, THE BOARD CONCLUDES THAT:

1. The appellants are aggrieved and have filed timely appeals.
2. The Board does not grant a hearing on the appeals.
3. The evidence in the record supports the finding that there is a reasonable assurance that the continued operation of the Eel Weir Hydropower Project as proposed by the applicant and conditioned by the WQC will meet State water quality standards. In making this conclusion the Board comments that the WQC appropriately considers and balances the designated uses of Sebago Lake, the Bypass, and the downstream uses of the Presumpscot River and will ensure that water quality standards are met throughout.

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BOARD ORDER

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4. The record does not contain persuasive evidence that would support reversing or amending the Department's Order of August 30, 2011 granting water quality certification, with conditions, for the continued operation of the Eel Weir Hydropower Project by S.D. Warren Company.

THEREFORE, the Board AFFIRMS the Department's August 30, 2011 Order #L-19937-33-J-N approving water quality certification for the continued operation of the Eel Weir Hydropower Project by S.D. Warren Company and DENIES the appeals of DOUGLAS H. WATTS AND CHARLES M. FRECHETTE.

DONE AND DATED AT AUGUSTA, MAINE, THIS _____ DAY OF _____, 2012.

BOARD OF ENVIRONMENTAL PROTECTION

BY: _____

Robert Foley, Chair

